



**United States Environmental Protection Agency
Region 9 Laboratory**

**1337 S. 46th Street Building 201
Richmond, CA 94804**

Date: 2/13/2012

Subject: Analytical Testing Results - Project R33911
SDG: 12038C

From: Brenda Bettencourt, Director
EPA Region 9 Laboratory
MTS-2

To: Richard Fetzer
US EPA Region 3, Eastern Response Branch
3HS31

Attached are the results from the analysis of samples from the **Dimock Residential Groundwater** project. These data have been reviewed in accordance with EPA Region 9 Laboratory policy.

A full documentation package for these data, including raw data and sample custody documentation, is on file at the EPA Region 9 Laboratory. If you would like to request additional review and/or validation of the data, please contact Eugenia McNaughton at the Region 9 Quality Assurance Office.

If you have any questions, please ask for Richard Bauer, the Lab Project Manager at (510)412-2300.

Analyses included in this report:

Dissolved Hydrocarbon Gases by GC



United States Environmental Protection Agency
Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Richard Fetzter

Project Number: R33911

Project: Dimock Residential Groundwater

US EPA Region 3, Eastern Response Branch

100 Gypsum Road

Stroudsburg PA, 18360

SDG: 12038C

Reported: 02/13/12 15:51

ANALYTICAL REPORT FOR SAMPLES

| Sample ID | Laboratory ID | Matrix | Date Collected | Date Received |
|-----------|---------------|--------|----------------|----------------|
| EB02 | 1202017-01 | Water | 02/05/12 15:00 | 02/07/12 11:10 |
| HW45 | 1202017-02 | Water | 02/06/12 10:28 | 02/07/12 11:10 |
| HW45-P | 1202017-03 | Water | 02/06/12 11:06 | 02/07/12 11:10 |
| TB24 | 1202017-04 | Water | 02/06/12 07:10 | 02/07/12 11:10 |
| HW43 | 1202017-05 | Water | 02/06/12 12:06 | 02/07/12 11:10 |
| HW43-P | 1202017-06 | Water | 02/06/12 12:19 | 02/07/12 11:10 |
| TB23 | 1202017-07 | Water | 02/06/12 07:05 | 02/07/12 11:10 |

SDG ID 12038C

Small amounts of methane were detected in the method blanks, field blanks and trip blanks. Reported methane values less than or equal to 5 ug/L are flagged as estimates due to possible contamination.

Work Order(s)

1202017



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Sample Results

| Analyte | Reanalysis / Extract | Result | Qualifiers / Comments | Quantitation Limit | Units | Batch | Prepared | Analyzed | Method |
|-----------------------------|-------------------------|--------|--------------------------|-----------------------|-------|---------|--|----------|----------------|
| Lab ID: 1202017-01 | | | | | | | Water - Sampled: 02/05/12 15:00 | | |
| Sample ID: EB02 | | | | | | | Dissolved Gases by RSK-175 | | |
| Methane | | 0.9 | B1, C1, J | 1.2 | ug/L | B2B0032 | 02/08/12 | 02/09/12 | RSK-175/SOP325 |
| Ethane | | ND | U | 1.2 | " | " | " | " | RSK-175/SOP325 |
| Ethene | | ND | U | 1.1 | " | " | " | " | RSK-175/SOP325 |
| <i>Surrogate: Acetylene</i> | | 118 % | | 66.4-153% | | " | " | " | |
| Lab ID: 1202017-02 | | | | | | | Water - Sampled: 02/06/12 10:28 | | |
| Sample ID: HW45 | | | | | | | Dissolved Gases by RSK-175 | | |
| Methane | | 1.0 | B1, C1, J | 1.2 | ug/L | B2B0032 | 02/08/12 | 02/08/12 | RSK-175/SOP325 |
| Ethane | | ND | U | 1.2 | " | " | " | " | RSK-175/SOP325 |
| Ethene | | ND | U | 1.1 | " | " | " | " | RSK-175/SOP325 |
| <i>Surrogate: Acetylene</i> | | 116 % | | 66.4-153% | | " | " | " | |
| Lab ID: 1202017-03 | | | | | | | Water - Sampled: 02/06/12 11:06 | | |
| Sample ID: HW45-P | | | | | | | Dissolved Gases by RSK-175 | | |
| Methane | | 0.9 | B1, C1, J | 1.2 | ug/L | B2B0032 | 02/08/12 | 02/08/12 | RSK-175/SOP325 |
| Ethane | | ND | U | 1.2 | " | " | " | " | RSK-175/SOP325 |
| Ethene | | ND | U | 1.1 | " | " | " | " | RSK-175/SOP325 |
| <i>Surrogate: Acetylene</i> | | 116 % | | 66.4-153% | | " | " | " | |
| Lab ID: 1202017-04 | | | | | | | Water - Sampled: 02/06/12 07:10 | | |
| Sample ID: TB24 | | | | | | | Dissolved Gases by RSK-175 | | |
| Methane | | 0.8 | B1, C1, J | 1.2 | ug/L | B2B0032 | 02/08/12 | 02/09/12 | RSK-175/SOP325 |
| Ethane | | ND | U | 1.2 | " | " | " | " | RSK-175/SOP325 |
| Ethene | | ND | U | 1.1 | " | " | " | " | RSK-175/SOP325 |
| <i>Surrogate: Acetylene</i> | | 115 % | | 66.4-153% | | " | " | " | |
| Lab ID: 1202017-05 | | | | | | | Water - Sampled: 02/06/12 12:06 | | |
| Sample ID: HW43 | | | | | | | Dissolved Gases by RSK-175 | | |
| Methane | | 0.9 | B1, C1, J | 1.2 | ug/L | B2B0032 | 02/08/12 | 02/08/12 | RSK-175/SOP325 |
| Ethane | | ND | U | 1.2 | " | " | " | " | RSK-175/SOP325 |
| Ethene | | ND | U | 1.1 | " | " | " | " | RSK-175/SOP325 |
| <i>Surrogate: Acetylene</i> | | 117 % | | 66.4-153% | | " | " | " | |
| Lab ID: 1202017-06 | | | | | | | Water - Sampled: 02/06/12 12:19 | | |
| Sample ID: HW43-P | | | | | | | Dissolved Gases by RSK-175 | | |
| Methane | | 0.9 | B1, C1, J | 1.2 | ug/L | B2B0032 | 02/08/12 | 02/08/12 | RSK-175/SOP325 |
| Ethane | | ND | U | 1.2 | " | " | " | " | RSK-175/SOP325 |
| Ethene | | ND | U | 1.1 | " | " | " | " | RSK-175/SOP325 |
| <i>Surrogate: Acetylene</i> | | 117 % | | 66.4-153% | | " | " | " | |
| Lab ID: 1202017-07 | | | | | | | Water - Sampled: 02/06/12 07:05 | | |



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| | | |
|--|---|---------------------------------|
| Project Manager: Richard Fetzer | US EPA Region 3, Eastern Response Branch | SDG: 12038C |
| Project Number: R33911 | 100 Gypsum Road | Reported: 02/13/12 15:51 |
| Project: Dimock Residential Groundwater | Stroudsburg PA, 18360 | |

Sample Results

| Analyte | Reanalysis / Extract | Result | Qualifiers / Comments | Quantitation Limit | Units | Batch | Prepared | Analyzed | Method |
|-----------------------------|-------------------------|--------|--------------------------|-----------------------|-------|--|----------|----------|----------------|
| Lab ID: 1202017-07 | | | | | | Water - Sampled: 02/06/12 07:05 | | | |
| Sample ID: TB23 | | | | | | Dissolved Gases by RSK-175 | | | |
| Methane | | 0.9 | B1, C1, J | 1.2 | ug/L | B2B0032 | 02/08/12 | 02/09/12 | RSK-175/SOP325 |
| Ethane | | ND | U | 1.2 | " | " | " | " | RSK-175/SOP325 |
| Ethene | | ND | U | 1.1 | " | " | " | " | RSK-175/SOP325 |
| <i>Surrogate: Acetylene</i> | | | 111 % | 66.4-153% | | " | " | " | |

Quality Control

| Analyte | Result | Qualifiers / Comments | Quantitation Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|---|--------|--------------------------|-----------------------|----------|----------------|--|------|----------------|-----|--------------|
| Batch B2B0032 - RSK175 - Dissolved HC Gases | | | | | | Prepared & Analyzed: 02/08/12 | | | | |
| | | | | | | Dissolved Gases by RSK-175 - Quality Control | | | | |
| Blank (B2B0032-BLK1) | | | | | | | | | | |
| Methane | 0.9 | C1, J | | 1.2 ug/L | | | | | | |
| Ethane | ND | U | | 1.2 " | | | | | | |
| Ethene | ND | U | | 1.1 " | | | | | | |
| Surrogate: Acetylene | | | | | | | | | | |
| | 78.5 | | | " | 66.5 | | 118 | 66.4-153 | | |
| LCS (B2B0032-BS1) | | | | | | | | | | |
| Methane | 47.7 | | | 1.2 ug/L | 44.1 | | 108 | 70-130 | | 200 |
| Ethane | 93.9 | | | 1.2 " | 83.2 | | 113 | 77-137 | | 200 |
| Ethene | 88 | | | 1.1 " | 78.3 | | 112 | 78-138 | | 200 |
| Surrogate: Acetylene | | | | | | | | | | |
| | 79.2 | | | " | 72.0 | | 110 | 66.4-153 | | |
| Matrix Spike (B2B0032-MS1) | | | | | | | | | | |
| Source: 1202017-02 | | | | | | | | | | |
| Methane | 43.2 | | | 1.2 ug/L | 44.1 | 0.966 | 96 | 70-130 | | 20 |
| Ethane | 84.7 | | | 1.2 " | 83.2 | ND | 102 | 70-130 | | 20 |
| Ethene | 80.2 | | | 1.1 " | 78.3 | ND | 102 | 70-130 | | 20 |
| Surrogate: Acetylene | | | | | | | | | | |
| | 76.2 | | | " | 72.0 | | 106 | 66.4-153 | | |
| Matrix Spike Dup (B2B0032-MSD1) | | | | | | | | | | |
| Source: 1202017-02 | | | | | | | | | | |
| Methane | 45.5 | | | 1.2 ug/L | 44.1 | 0.966 | 101 | 70-130 | 5 | 20 |
| Ethane | 89.4 | | | 1.2 " | 83.2 | ND | 107 | 70-130 | 5 | 20 |
| Ethene | 84 | | | 1.1 " | 78.3 | ND | 107 | 70-130 | 5 | 20 |
| Surrogate: Acetylene | | | | | | | | | | |
| | 77.4 | | | " | 72.0 | | 107 | 66.4-153 | | |



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Qualifiers and Comments

J The reported result for this analyte should be considered an estimated value.

C1 The reported concentration for this analyte is below the quantitation limit.

B1 The concentration of this analyte found in this sample was less than five times the concentration found in the associated method blank.

U Not Detected

NR Not Reported

RE1, RE2, etc: Result is from a sample re-analysis.